CENTUL LUL & CLATER

JAN 0 7 2005

HP Docket No. 10004754-1

REMARKS

Applicant(s) appreciate the Office's review of the present application. In response to the Office Action, the cited references have been reviewed, and the rejections and objections made to the claims by the Examiner have been considered. The claims presently on file in the present application are believed to be patentably distinguishable over the cited references, and therefore allowance of these claims is earnestly solicited. Reconsideration of the application in light of the following remarks is respectfully requested.

Rejections

Rejection Under 35USC Section 103

Claims 1, 2, 5-8, 12-17, 19, 20, and 22-29 have been rejected under 35 USC Section 103(a), as being unpatentable over U.S. patent 5,140,348 to Jamzadeh et al. ("Jamzadeh '348") in view of U.S. patent 5,889,578 to Jamzadeh ("Jamzadeh '578"). Applicants respectfully traverse the rejection and request reconsideration based on features in the claims which are neither disclosed nor suggested in the cited references, taken either alone or in combination.

As to a rejection under 103(a), the U.S. Patent and Trademark Office ("USPTO") has the burden under section 103 to establish a *prima facie* case of obviousness by showing some objective teaching in the prior art or generally available knowledge of one of ordinary skill in the art that would lead that individual to the claimed invention. *See In re Fine, 837 F.2d*1071, 5 U.S.P.O.2d 1596, 1598 (Fed. Cir. 1988). The Manual of Patent Examining

Procedure (MPEP) section 2143 discusses the requirements of a *prima facie* case for obviousness. That section provides as follows:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach

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or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and reasonable expectation of success must be found in the prior art, and not based on applicant's disclosure.

In the present case, (a) the applied references do not teach or suggest all of Applicants' claim limitations, and (b) there is no suggestion or motivation to modify the reference or to combine reference teachings.

Independent claim 1, and its dependent claims 2, 5-8, 12-17, and 23-29, are patentably distinguishable over the cited references because claim 1 emphasizes the novel features of the present invention which automatically generates a visually attractive frame for a digital image based on analysis of the digital image data and categorization of the image. In this regard, claim 1 recites a method for automatically generating a framed digital image which includes:

"analyzing a portion of a first data set representing pixels of an unframed digital image so as to identify a plurality of image components each corresponding to a spatial region of the pixels;

independently analyzing each of the image components to determine a set of component characteristics for the corresponding image component;

collectively analyzing the plurality of sets of component characteristics to determine overall image characteristics indicative of subject matter of the unframed image;

analyzing the overall image characteristics to determine an image category corresponding to the subject matter;

determining at least one frame attribute by applying framing rules for the image category to the overall image characteristics; and

generating a second data set representing pixels of the framed digital image, the second data set defining a representation of the unframed digital image surrounded by a frame having the at least one frame attribute." (emphasis added)

The applied references do not teach or suggest all of Applicants' claim limitations. With regard to the determining step of claim 1, the Office states that Jamzadeh '348 discloses "determining at least one frame attribute by applying framing rules to the overall image characteristics (column 5, lines 10-13: the dominant color ("overall image characteristic") is selected for inclusion in the frame)" (Office Action, p.3). However, the Office has not considered all the limitations of Applicants' determining step, which recites "determining at least one frame attribute by applying framing rules for the image category to the overall image characteristics". The Office admits that "Jamzadeh '348 is silent as to the particular analysis (i.e. the four analyzing steps) for ascertaining the image category and framing the image

based on its category" (Office Action, p.3). Thus the Jamzadeh '348 reference does not teach or suggest categorizing the digital image, or the existence of any image category. It follows, then, that the Jamzadeh '348 reference cannot teach or suggest applying framing rules for the image category to the overall image characteristics. Therefore, Applicants believe that the Office is incorrect in stating that the Jamzadeh '348 reference teaches or suggests the determining step of claim 1. Nor does the Jamzadeh '578 reference teach or suggest the determining step, for this reference is not directed to image framing, and thus does not teach or suggest the use or existence of framing rules and frame attributes as recited by Applicants.

Furthermore, there is no suggestion or motivation to modify the reference or to combine reference teachings. The Jamzadeh '348 reference describes an "electrostatographic color image production apparatus" for printing "images with border regions therebetween" which "create a border color in one of the dominant colors of the multicolor image" (Abstract). However, the Jamzadeh '578 reference is directed to a completely different problem, that of "classifying ... images on a roll of film so that a photographer can describe and identify to the photofinisher the type of images of interest to the photographer and to identify which images by category on the roll of film are to receive certain customer requested procedures such as multiple prints, enlargements or no printing of that image at all" (Abstract). The Jamzadeh '348 reference does not suggest the need for, or use of, an image categorization scheme to create a border color for its printed images. The dominant colors of the multicolor image of the Jamzadeh '348 reference are determined by mapping the image pixel colors into regions of the RGB color space (col. 4, ln. 28 - col. 5, ln. 9; Fig. 6). The outcome of such a mapping is dependent solely on the color of individual pixels, and would be independent of any image category to which the multicolor image might be assigned by application of the teachings of the Jamzadeh '578 reference. Because the Jamzadeh '348 reference would not benefit from the image categorization of the Jamzadeh '578 reference, it teaches away from the combination.

It is also noted that the sole inventor of the Jamzadeh '578 reference apparently is one of the joint inventors of the previously-filed Jamzadeh '348 reference. The Jamzadeh '578 reference discloses a number of related references, including at least three by inventor

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Jamzadeh, but does not disclose the Jamzadeh '348 reference. Presumably the common inventor would have suggested the desirability of combining the teachings of the Jamzadeh '578 reference with the Jamzadeh '348 reference had it been obvious to do so.

Applicants respectfully traverse the Office's assertion that the claimed combination of Applicants' invention is obvious to a person having ordinary skill in the art. Such could be possible only in hindsight and in light of Applicants' teachings.

Therefore, the rejection is improper at least for these reasons and should be withdrawn.

Dependent claim 5 is further patentably distinguishable over the cited references because claim 5 emphasizes further novel features of the present invention which automatically generates a visually attractive frame for a digital image based on analysis of the digital image data and categorization of the image. In this regard, claim 5 recites a method for automatically generating a framed digital image

"wherein the analyzing the portion of the first data set includes:
mapping the pixels to a three-dimensional color space; and
selecting a region of the three-dimensional color space for each of the image
components" (emphasis added)

The applied references do not teach or suggest all of Applicants' claim limitations. With regard to claim 5, the Office states that in the Jamzadeh '578 reference, "pixels are in 3-D RGB color space and a region of the color space is selected as the dominant color for each region". However, when all the limitations of claim 5 and its dependence on claim 1 are considered, the limitations as a whole are not taught or suggested by the Jamzadeh '578 reference. Analyzing the portion of the first data set, as recited by Applicants, is performed to "identify a plurality of image components each corresponding to a spatial region of the pixels" (claim 1). In the Jamzadeh '578 reference, the spatial regions of the pixels which correspond to image components are the peripheral regions and the central regions as depicted in Figs. 2A-2D and Fig. 4, which are in 2-D image space, not in 3-D color space. The use of 3-D RGB color space is unrelated to identifying the image components, as recited in Applicants' claims. Accordingly, Applicants believe that teaching or suggesting all the

elements of Applicants' claim 5 in the Jamzadeh '348 reference combined with the Jamzadeh '578 reference could be possible only in hindsight and in light of Applicants' teachings.

Therefore, the rejection is improper for at least for these reasons and should be withdrawn.

The rejection of independent claim 19, and its dependent claim 20, is respectfully traversed for substantially the same reasons as discussed above with respect to independent claim 1. Claim 19 recites an image processing apparatus that includes:

"framing rules <u>usable by the image categorizer</u> to automatically define at least one frame attribute <u>based on the image category</u> and the overall image characteristics" (emphasis added)

With regard to claim 19, the Office directed Applicants to the claim 1 rejection. As explained above with respect to claim 1, (a) the applied references do not teach or suggest all of Applicants' claim limitations, and (b) there is no suggestion or motivation to modify the reference or to combine reference teachings. Accordingly, Applicants believe that teaching or suggesting all the elements of Applicants' claim 19 in the Jamzadeh '348 reference combined with the Jamzadeh '578 reference could be possible only in hindsight and in light of Applicants' teachings. Therefore, the rejection is improper for at least for these reasons and should be withdrawn.

The rejection of independent claim 22 is respectfully traversed for substantially the same reasons as discussed above with respect to independent claim 1. Claim 22 recites an image processing apparatus that includes:

"a fifth logical segment of the instructions configured to determine at least one frame attribute by applying framing rules for the image category to the overall image characteristics" (emphasis added)

With regard to claim 22, the Office directed Applicants to the claim 1 rejection. As explained above with respect to claim 1, (a) the applied references do not teach or suggest all of Applicants' claim limitations, and (b) there is no suggestion or motivation to modify the reference or to combine reference teachings. Accordingly, Applicants believe that teaching or suggesting all the elements of Applicants' claim 22 in the Jamzadeh '348 reference combined with the Jamzadeh '578 reference could be possible only in hindsight and in light of

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Applicants' teachings. Therefore, the rejection is improper for at least for these reasons and should be withdrawn.

Claim 21 has been rejected under 35 USC Section 103(a), as being unpatentable over U.S. patent 5,140,348 to Jamzadeh et al. ("Jamzadeh '348") in view of U.S. patent 5,889,578 to Jamzadeh ("Jamzadeh '578"), and further in view of U.S. patent 5,600,412 to Connors ("Connors"). Applicants respectfully traverse the rejection and request reconsideration based on the dependence of this claim on independent claim 19, whose reasons for allowability over the Jamzadeh '348 and Jamzadeh '578 references have been discussed heretofore and against which the Connors reference has not been cited.

Formalities

Amendment of the Specification

Page 6 of the specification has been amended to delete an embedded hyperlink, as requested by the Office.

Conclusion

Attorney for Applicant(s) has carefully reviewed each one of the cited references made of record and not relied upon, and believes that the claims presently on file in the subject application patentably distinguish thereover, either taken alone or in combination with one another.

Therefore, all claims presently on file in the subject application are in condition for immediate allowance, and such action is respectfully requested. If it is felt for any reason that direct communication with Applicant's attorney would serve to advance prosecution of this case to finality, the Examiner is invited to call the undersigned Robert C. Sismilich, Esq. at the below-listed telephone number.

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Intellectual Property Administration

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AUTHORIZATION TO PAY AND PETITION FOR THE ACCEPTANCE OF ANY NECESSARY FEES

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Respectfully submitted,

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